

C. REMARKS

In response to the Office Action dated March 13, 2003, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Upon entry of the Amendment, claims 1-22 will be pending in this application with claims 1, 14, 19, 20 and 22 being independent. Applicants respectfully submit that the claims as presented are in condition for allowance.

1. 35 U.S.C. §102(a) Eastman et al. Rejection

Claims 1-22 stand rejected under 35 U.S.C. §102(a) as being anticipated by U.S. Patent No. 6,216,266 to Eastman et al. ("Eastman"). Applicants traverse this rejection.

In support of this ground of rejection, the Examiner relies on Eastman, which teaches the following.

The quality factor may include any factor suitably related to accurate antenna aiming. In one embodiment, this includes the measured strength of the program information signal as it is received at the set top box 110.

Other factors may also be used, including the measured spectral content of the program information signal, measured multipath interference, or interfering bleed-over from adjacent channels or transmitters. Where the program information signal comprises digital information, the measured bit error rate of the digital information may be used as a suitable quality factor.

The quality factor may be based on measurements taken at any stage or combination of stages in the process of receiving the program information signal (i.e. after the detection, demodulation, or intermediate frequency (IF) stages) as appropriate.¹

¹ Eastman at col. 3, ll.51-67.

Applicants submit that Eastman fails to teach or suggest "said CPU calculates a bit error rate (BER) value of the signal from said bitstream, calculates a carrier to noise (C/N) value of the signal from said bitstream, and calculates an overall quality of signal based on said BER value and said C/N value," as recited by independent claim 1, as amended.

Applicants also submit that Eastman fails to teach or suggest "signal assessment means supported in said handheld housing and attachable to the antenna for receiving a signal therefrom that is indicative of the degree of alignment between the antenna and the signal transmitting device and for assessing the received signal by extracting a bitstream from the received signal, calculating a bit error rate (BER) value of the received signal from said bitstream, calculating a carrier to noise (C/N) value of the received signal from said bitstream, and calculating an overall quality of signal based on said BER value and said C/N value," as recited by independent claim 14, as amended.

Applicants also submit that Eastman fails to teach or suggest "said CPU calculates a bit error rate (BER) value of the signal from said bitstream, calculates a carrier to noise (C/N) value of the signal from said bitstream, and calculates an overall quality of signal based on said BER value and said C/N value," as recited by independent claim 19, as amended.

Applicants also submit that Eastman fails to teach or suggest "calculating a BER value of the signal in a portable device; displaying the calculated BER value of the signal on the portable device; calculating a C/N value of the signal in the portable device;

displaying the calculated C/N value of the signal on the portable device; calculating an overall quality of signal based on said BER value and said C/N value; displaying the calculated overall quality of signal on the portable device; and reorienting the antenna until the calculated BER value matches a predetermined BER value," as recited by independent claim 20, as amended.

Applicants also submit that Eastman fails to teach or suggest "instructions which, when executed by a processor, cause the processor to "calculate a BER value of the signal; display the calculated BER value of the signal on a portable device; calculate a C/N value of the signal; display the calculated C/N value of the signal on the portable device; calculate an overall quality of signal based on said BER value and said C/N value; and display the calculated overall quality of signal on the portable device," as recited by independent claim 22, as amended.

As set forth above, Eastman fails to teach or suggest every element of amended claims 1, 14, 19, 20 and 22. Applicants submit that claims 1, 14, 19, 20 and 22 are allowable for at least this reason and that claims 2-13, 15-18, 20, and 21 are allowable by virtue of their dependency, as well as on their own merits.

Accordingly, Applicants request reconsideration and withdrawal of this rejection.²

² See MPEP §2131("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *quoting Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *quoting Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).).

2. 35 U.S.C. §102(b) Tilford et al. Rejection

Claims 1-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,915,020 to Tilford et al. ("Tilford"). Applicants traverse this rejection.

In support of this ground of rejection, the Examiner relies on Tilford, which teaches the following.

Preferably, software is provided with the receiver/decoder electronics to assist in the aiming of the antenna. For example, a signal strength meter may be provided to give an indication of the strength of the presently received satellite signal. The signal strength meter gives an operator feedback to direct the aiming of the antenna. In addition, a stand or tripod may be provided for supporting and positioning the unit.³

Applicants submit that Tilford fails to teach or suggest "said CPU calculates a bit error rate (BER) value of the signal from said bitstream, calculates a carrier to noise (C/N) value of the signal from said bitstream, and calculates an overall quality of signal based on said BER value and said C/N value," as recited by independent claim 1, as amended.

Applicants also submit that Tilford fails to teach or suggest "signal assessment means supported in said handheld housing and attachable to the antenna for receiving a signal therefrom that is indicative of the degree of alignment between the antenna and the signal transmitting device and for assessing the received signal by extracting a bitstream from the received signal, calculating a bit error rate (BER) value of the received signal from said bitstream, calculating a carrier to noise (C/N) value of the received signal from

³ Tilford at col. 10, ll. 21-28.

said bitstream, and calculating an overall quality of signal based on said BER value and said C/N value," as recited by independent claim 14, as amended.

Applicants also submit that Tilford fails to teach or suggest "said CPU calculates a bit error rate (BER) value of the signal from said bitstream, calculates a carrier to noise (C/N) value of the signal from said bitstream, and calculates an overall quality of signal based on said BER value and said C/N value," as recited by independent claim 19, as amended.

Applicants also submit that Tilford fails to teach or suggest "calculating a BER value of the signal in a portable device; displaying the calculated BER value of the signal on the portable device; calculating a C/N value of the signal in the portable device; displaying the calculated C/N value of the signal on the portable device; calculating an overall quality of signal based on said BER value and said C/N value; displaying the calculated overall quality of signal on the portable device; and reorienting the antenna until the calculated BER value matches a predetermined BER value," as recited by independent claim 20, as amended.

Applicants also submit that Tilford fails to teach or suggest "instructions which, when executed by a processor, cause the processor to "calculate a BER value of the signal; display the calculated BER value of the signal on a portable device; calculate a C/N value of the signal; display the calculated C/N value of the signal on the portable device; calculate an overall quality of signal based on said BER value and said C/N value; and display the calculated overall quality of signal on the portable device," as recited by independent claim 22, as amended.

As set forth above, Tilford fails to teach or suggest every element of amended claims 1, 14, 19, 20 and 22. Applicants submit that claims 1, 14, 19, 20 and 22 are allowable for at least this reason and that claims 2-13, 15-18, 20, and 21 are allowable by virtue of their dependency, as well as on their own merits.

Accordingly, Applicants request reconsideration and withdrawal of this rejection.

3. 35 U.S.C. §102(b) Holliday Rejection

Claims 1-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by International Application WO 00/24083 to Holliday. ("Holliday"). Applicants traverse this rejection.

In support of this ground of rejection, the Examiner relies on Holliday, which teaches the following.

The GEC Plessey NIM includes signal amplifier with an automatic gain control circuit that can be controlled to output data on data path 9 representing the gain setting. The gain setting is inversely proportional to signal strength (the greater the gain the weaker the received signal). The gain data from the receiver 2 is therefore processed by the processor 6 to generate appropriate data for display of the graphical bar. A weak signal indicates that the antenna is not aligned properly with the satellite or that the line of sight between the antenna and the satellite is not entirely clear. Thus the graphical signal strength bar enables the installer to adjust the position of the antenna to correct alignment with the satellite.

Depending on the position of the antenna 2 on the surface of the earth the LNB 3 may have to be skewed by a few degrees off the axis of the antenna so as to align properly with the polarized signals from the satellite. The GEC Plessey NIM includes signal processing circuitry which is able to output data indicating bit error rates in the received data in terms of bit errors per 1000 received bits. The bit error rate is an indication of the quality of the received

signals. Therefore in another mode of operation the processor 6 is arranged to receive from the receiver 2, via data path 9, bit error rate data for both horizontally and vertically polarized signals. The processor 6 outputs this data to the display 11 for display thereon. The installer is then able to adjust the skew of the LNB 3 to maximize the quality of the received signals by equalizing the bit error rates of the horizontal and vertical signals.⁴

Applicants submit that Holliday fails to teach or suggest "said CPU calculates a bit error rate (BER) value of the signal from said bitstream, calculates a carrier to noise (C/N) value of the signal from said bitstream, and calculates an overall quality of signal based on said BER value and said C/N value," as recited by independent claim 1, as amended.

Applicants also submit that Holliday fails to teach or suggest "signal assessment means supported in said handheld housing and attachable to the antenna for receiving a signal therefrom that is indicative of the degree of alignment between the antenna and the signal transmitting device and for assessing the received signal by extracting a bitstream from the received signal, calculating a bit error rate (BER) value of the received signal from said bitstream, calculating a carrier to noise (C/N) value of the received signal from said bitstream, and calculating an overall quality of signal based on said BER value and said C/N value," as recited by independent claim 14, as amended.

Applicants also submit that Holliday fails to teach or suggest "said CPU calculates a bit error rate (BER) value of the signal from said bitstream, calculates a carrier to noise (C/N) value of the signal from said bitstream, and calculates an overall

⁴ Holliday at p. 5, l. 17 - p.6, l. 9.

quality of signal based on said BER value and said C/N value," as recited by independent claim 19, as amended.

Applicants also submit that Holliday fails to teach or suggest "calculating a BER value of the signal in a portable device; displaying the calculated BER value of the signal on the portable device; calculating a C/N value of the signal in the portable device; displaying the calculated C/N value of the signal on the portable device; calculating an overall quality of signal based on said BER value and said C/N value; displaying the calculated overall quality of signal on the portable device; and reorienting the antenna until the calculated BER value matches a predetermined BER value," as recited by independent claim 20, as amended.

Applicants also submit that Holliday fails to teach or suggest "instructions which, when executed by a processor, cause the processor to "calculate a BER value of the signal; display the calculated BER value of the signal on a portable device; calculate a C/N value of the signal; display the calculated C/N value of the signal on the portable device; calculate an overall quality of signal based on said BER value and said C/N value; and display the calculated overall quality of signal on the portable device," as recited by independent claim 22, as amended.

As set forth above, Holliday fails to teach or suggest every element of amended claims 1, 14, 19, 20 and 22. Applicants submit that claims 1, 14, 19, 20 and 22 are allowable for at least this reason and that claims 2-13, 15-18, 20, and 21 are allowable by virtue of their dependency, as well as on their own merits.


Accordingly, Applicants request reconsideration and withdrawal of this rejection.

D. CONCLUSION

Applicants submit this application is in condition for allowance and request favorable action in the form of a Notice of Allowance.

Respectfully submitted,

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